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HOW TO DESTROY ENGLISH SPARROWS.

BY

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U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF BIOLOGICAL SURVEY,
Washington, D. C., November 20, 1909.

SIR: I have the honor to transmit herewith and to recommend for publication as a Farmers' Bulletin a report by N. Dearborn, Assistant, Biological Survey, on How to Destroy English Sparrows. Introduced into the United States many years ago from Europe, this sparrow has multiplied and extended its range until now it is numerous and firmly established over most of the country. The bad qualities of the bird far outweigh its good ones, and, although its extermination is impracticable, a reduction of its numbers is feasible and important. The present bulletin aims to describe the best methods of destruction.

Respectfully,

H. W. HENSHAW,
Acting Chief, Biological Survey.

HON. JAMES WILSON,
Secretary of Agriculture.

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HOW TO DESTROY ENGLISH SPARROWS.

INTRODUCTION.

In its economic relations the English sparrow among birds is comparable to the rat among mammals. It is cunning, destructive, and filthy. This sparrow was introduced into America about sixty years ago, and is now distributed generally over the eastern half of the United States and southern Canada and locally westward to the Pacific coast. This rapid dissemination is a result of the bird's hardiness, extraordinary fecundity, diversity of food, aggressive disposition, and almost complete immunity from natural enemies through its sagacity and its preference for thickly settled communities.

Its natural diet consists of seeds, but it eats a great variety of other foods. While much of its annual fare consists of waste material from the streets, in autumn and winter it consumes quantities of weed seed, and in summer numerous insects. The destruction of weed seed is undeniably in the sparrow's favor. Its record as to insects is not so clear. There is substantial evidence that it eats certain harmful insects quite freely when these are abundant, but that it habitually seeks insects, or that it prefers them to seeds or other vegetable food, is not borne out by the evidence. Out of 522 English sparrow stomachs examined by the Biological Survey,^a 47 contained noxious insects, 50 contained beneficial insects, and 31 contained insects of little or no economic importance. This report shows conclusively that, aside from the destruction of weed seed, there is very little to be said in the sparrow's favor.

On the other hand, much can be said against the bird. It destroys small fruits, as cherries, grapes, pears, and peaches. It also destroys buds and flowers of cultivated trees, shrubs, and vines. In the garden it eats seeds as they ripen, and nips off tender young vegetables as they appear above ground, peas and lettuce being especially subject to attack. It damages wheat and other grains when newly sowed, ripening, and in shocks. It reduces the numbers of some of

^a U. S. Department of Agriculture, Division of Economic Ornithology and Mammalogy, Bulletin 1, The English Sparrow in North America, p. 143, 1889. An exhaustive account now out of print.



FIG. 1.—English sparrow, male and female, showing the manner in which they take possession of nesting boxes provided for native birds.

our most useful native species, such as bluebirds, house wrens, purple martins, tree swallows, cliff swallows, and barn swallows, by destroying the eggs and young and by usurping the nesting places. It attacks other familiar native birds, as the robin, wren, red-eyed vireo, catbird, and mocking bird, causing them to desert parks and shady streets of towns. Unlike our native birds whose places it usurps, it has no song, but is noisy and vituperative. It defiles buildings and ornamental trees, shrubs, and vines with its excrement and with its bulky nests.

The evidence against the English sparrow is overwhelming, and the present unfriendly attitude of the public toward it is reflected in our State laws. Nowhere is it included among the birds that are protected. In response to frequent inquiries for means of abating the sparrow nuisance received by the Biological Survey, a few approved methods applicable to different conditions are here described.

Sparrows frequently give annoyance by roosting in ornamental vines and in crevices about buildings. If driven out late at night, several nights in succession, they will usually desert the roost. A jet of water from a garden hose is a potent disturber, particularly on frosty nights. Where water is not available, small Roman candles may be employed.

Though sparrows may be driven from a given neighborhood, the relief thus obtained is only temporary, and has the further objection that the nuisance is simply transferred elsewhere. More drastic action is therefore preferable.

PREVENTION OF INCREASE.

The most effective method of preventing the increase of sparrows in a locality is to destroy their nests at intervals of ten or twelve days throughout the breeding season. Occasionally they build large covered nests in trees, but as a rule they build open nests in bird houses, electric-light hoods, cornices, waterspouts, and similar places. While it is often difficult to reach nests with the hand, they can usually be torn down by means of a long pole having an iron hook at the tip. By a concerted and continued movement to destroy every nest after the eggs are laid, English sparrows in any locality may be gradually reduced without resorting to shot or poison.

METHODS OF DESTRUCTION.

AT NESTS.

The sparrow's habit of nesting in cavities can be turned to account against it. By providing one-room bird houses, or even packing boxes or tin cans, and putting them in trees or on poles or buildings

at a height of about 10 feet, the birds may be captured after dark

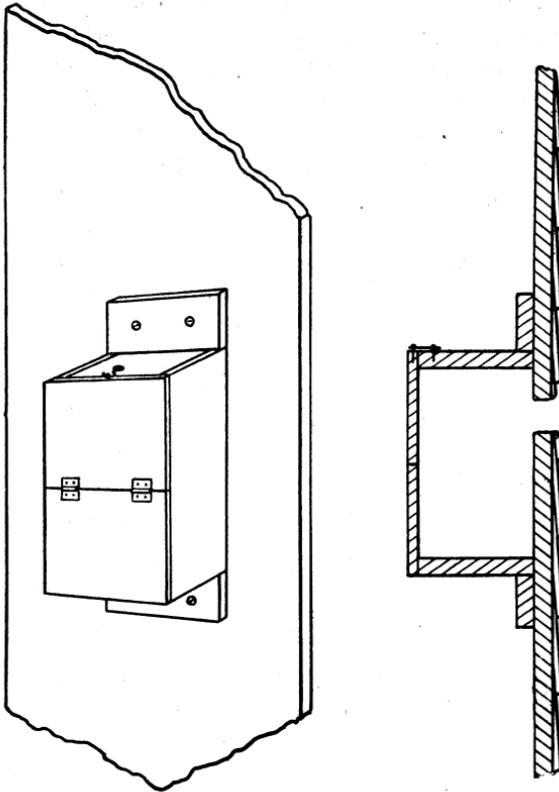


FIG. 2.—Perspective and sectional drawings of an improvised nesting box for the interior of buildings.

with the aid of a long-handled net. This net should have a deep bag and a small hoop made to fit the front of the boxes closely. After the net has been quietly placed over the entrance, a few raps on the box will send the tenant into it. Dilapidated buildings may sometimes be fitted up for catching sparrows in this way, as well as for destroying their nests and eggs. Figure 2 shows how this can be done. An ordinary wooden box may be nailed to

the inside of the building over a hole made to admit the sparrows. The box should be arranged so that the top or upper part of the back can be lifted to gain access to the inside.

The box illustrated in figure 3 is designed to be hung on a building or a tree. Its floor should be about 6 inches square and its height at the eaves about 8 inches. The roof should be hinged at the top for removing the eggs or young. Such boxes may be built of rough boards at slight cost. By distributing a number of them about orchards, shade trees, and out-buildings, and catching the sparrows that occupy them, or by destroying eggs, the work of extermination may be carried on at a season when other methods are least effective.

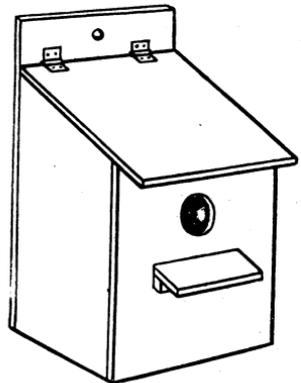


FIG. 3.—An inexpensive nest box for English sparrows.

BAITING.

Preliminary to the following destructive measures, sparrows should be baited until they are attached to the spot selected for their execution. Seeds, grain, or waste from the table, if supplied regularly, will soon establish a feeding place. If a general campaign is to be undertaken, enough such feeding places should be maintained to attract to them practically all the English sparrows in the neighborhood. This can easily be done in winter when food is scarce. After thus baiting the sparrows they may be trapped, shot, or poisoned.

TRAPPING.

Traps alone are inadequate to exterminate sparrows, but a reduction of numbers can be effected by using a shallow box not less than 4 feet square, open on one side and covered with woven wire on the other. One side of this trap rests on the ground, while the opposite

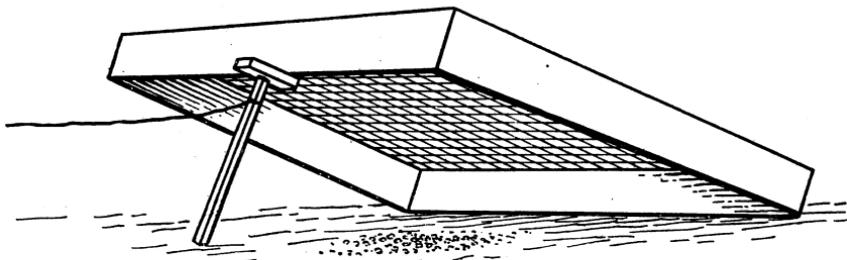


FIG. 4.—A sparrow trap.

side is supported by a stick 18 inches long. Near the upper end of this stick is attached a long cord, and between the top of it and the edge of the trap (see fig. 4) is placed a chip. By setting the trap over bait and pulling the cord from a sheltered point of observation when a flock of sparrows is beneath it, numbers of them may be caught. Instead of the box described above, by which the birds are taken alive, an old door or similar device may be employed as a deadfall. In either case the trap should be kept set and baited until the sparrows are not afraid to go under it. The best time for trapping is just after a snowstorm, when the birds have been fasting. Then, if the ground be cleared and chaff and grain be put under the trap, the birds will crowd in and enable the trapper to secure nearly all of the local flock. If any escape they will spread the fear of traps, and before long very few of the birds can be induced to go into one.

SHOOTING.

Sparrows are accustomed to feed in close flocks, and when thus assembled a large number can be killed by a charge of No. 10 shot. The best way is to scatter grain over long, narrow areas and shoot the

sparrows at these baiting places. Where sparrows infest poultry yards, the bait may be placed on a horizontal board, supported at such an elevation that the birds can be shot without danger to the poultry.

UTILIZATION OF SPARROWS FOR FOOD.

Since English sparrows are a pest and a reduction of their numbers is important on economic grounds, there would seem to be no reason why the birds, when trapped or shot, should not be utilized for food in this country, as they have been in the Old World for centuries. Their flesh is palatable and nutritious, and in city restaurants they are often served under the name of reed birds.

POISONING.

Where the use of poison is not prohibited by law, it may be effectively used to reduce the number of sparrows. Of the different poisons tested, the most satisfactory is strychnia sulphate. It is easily prepared and acts quickly. Wheat has proved to be a good bait, as well as an excellent vehicle for administering the poison. The grain should be regularly supplied at the baiting stations until the birds have become accustomed to resort to the place. A good time to put it out is early morning, as the birds are sure to be hungry for breakfast. The capacity of the sparrow's crop and stomach is about 30 kernels of wheat, varying more or less according to the size of the kernels. In deciding the amount of poisoned wheat to put out at one time, it is well to estimate the number of sparrows frequenting a feeding place and to allow about 20 kernels for each sparrow. Although 2 kernels of wheat coated with the solution described below have been known to kill a sparrow, 6 or 7 kernels are required to insure fatal results. Only as much poison should be put out as is likely to be eaten in one day, as exposure to moisture reduces its virulence. Furthermore, sparrows that take less than a fatal quantity, or that become frightened by the death of comrades, will forsake a feeding place if poison is kept there constantly. It is better, therefore, to supply unpoisoned wheat after each poisoning until the birds have recovered confidence. An important advantage in having several feeding grounds is that they may be used in rotation, the sparrows forgetting their fear of one while the others in turn are receiving poison.

A poison mixture that has proved very effective is prepared as follows: Put one-eighth ounce of strychnia sulphate into three-fourths of a gill of hot water and boil until dissolved. Moisten 1½ teaspoonfuls of starch with a few drops of cold water, add it to the poison solution, and heat till the starch thickens. Pour the hot poisoned starch solution over 1 quart of wheat and stir until every

kernel is coated. Small-kerneled wheat sold as poultry food, if reasonably clean, is preferable to first quality grain, being cheaper and more easily eaten by the sparrows. A 2-quart glass fruit jar is a good vessel to mix in, as it is easily shaken and allows the condition of the contents to be seen. If the coated wheat be spread thinly on a hard, flat surface, it will be dry enough for use in a short time. It should be dried thoroughly if it is to be put into jars and kept for future use. Dishes employed in preparing poison may be safely cleansed by washing.

The poison should be well scattered, so that many birds may be able to partake at the same time, since after a few are affected their actions excite the suspicion of their comrades. Usually a few sparrows get only enough strychnine to paralyze them for a few hours, after which they recover. It is important, therefore, to visit the feeding places two or three hours after distributing poison to prevent such birds from escaping. It is well also to remove dead birds promptly to avoid exciting the suspicions of those that are unaffected. In northern latitudes the best time to put out poison is just after a snowstorm, when other food is covered. The feeding place should be cleared of snow and the poison laid early in the morning.

Sparrows should be baited in secluded places, safe from interruptions and where doves and poultry are not endangered. Roofs, back yards, and unused poultry runs are favorable situations. Proximity to low trees, grape arbors, and similar retreats has the advantage that sparrows go to such places between meals, and many dead birds will be found there well away from the bait. If undisturbed, poisoned birds will usually be found within a few feet of where the bait was spread, death occurring in from three to twenty minutes. Where doves or poultry are likely to be poisoned, the sparrows, after being baited, may be induced to feed in small covered pens made of coarsely meshed wire netting and having the sides raised about an inch and a half above the ground. There is practically no danger that cats or other animals will die from eating sparrows that have been poisoned. Any wheat coated by the above process, which is overlooked by the birds, will become harmless after a few rains.

Sparrows can be reduced locally to almost any desired extent by the methods outlined in this bulletin, but it should not be forgotten that such reduction can be made permanent only by systematic and continued efforts.

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